

## CLIMATOLOGICAL DATA FOR MAY, 1912.

## DISTRICT No. 8, TEXAS AND RIO GRANDE VALLEY.

By BUNNEMEYER, District Editor.

## GENERAL SUMMARY.

This is the first time in the last seven months that the monthly mean temperature for the district as a whole exceeded the normal. A moderate deficiency occurred, however, in the New Mexico area. The first half of the month was persistently cool, while the latter half was marked by unusually high day temperatures and relatively cool nights. The precipitation was decidedly deficient, except locally in west-central Texas and near the Texas coast. The excess was most marked in Nueces County, where the monthly amounts ranged from 5 to 14 inches; and the deficiency was greatest in the middle Rio Grande Valley, where many stations received little or no moisture. The precipitation was poorly distributed both as to time and place, nearly all occurring in the eastern portion of the district during the first half of the month, and in the western portion between the 8th and 15th. Destructive local storms were not so frequent nor so severe as is usual at this season. The percentage of possible sunshine and the wind movement were large, and during the latter half of the month clear skies, high day temperatures, and fresh winds caused the ground to dry out rapidly. The average number of days with 0.01 inch or more of precipitation was three in Colorado and New Mexico, and five in Texas.

Snow occurred in the upper Rio Grande and upper Rio Pecos valleys, mostly on the 13th-14th, and the amounts were large for May, the heaviest fall being 16 inches at Red River Canyon, N. Mex.

The greatest monthly amounts of precipitation were: In Colorado, 1.26 inches at La Veta Pass; in New Mexico, 1.87 inches at Las Vegas; and in Texas, 14.03 inches at Laureles Ranch. There was no precipitation or inappreciable amounts only at 1 station in Colorado, at 12 stations in New Mexico, and at 4 in Texas. Amounts of 2.50 inches or more in 24 consecutive hours occurred at 23 stations in Texas, the heaviest being 6.56 inches at Corpus Christi on the 5th-6th.

## TEMPERATURE.

The mean temperature was  $0.6^{\circ}$  above the normal in Colorado,  $0.8^{\circ}$  below in New Mexico, and  $1.4^{\circ}$  above in Texas. The coldest weather of the month occurred from the 4th to 6th in the western portion of the district, and from the 14th to 17th in the eastern portion, while the warmest occurred between the 24th and 31st. The mean daily range of temperature varied from about  $8^{\circ}$  on the Texas coast to about  $37^{\circ}$  in the western portion of the district. Severe frosts occurred in New Mexico from the 3d to 5th, and again in the northern and central portions of that State from the 12th to 15th.

The highest and lowest temperatures reported were: In Colorado,  $85^{\circ}$  at Saguache on the 30th and  $5^{\circ}$  at Hermit on the 5th; in New Mexico,  $102^{\circ}$  at 4 stations on the 26th, and  $20^{\circ}$  at 4 stations on several dates; and in Texas,  $110^{\circ}$  at Fort McIntosh and Eagle Pass on the 28th and  $36^{\circ}$  at Valentine on the 15th. The local monthly means ranged from  $37.8^{\circ}$  to  $52.4^{\circ}$  in Colorado, from  $41.2^{\circ}$  to  $71.1^{\circ}$  in New Mexico, and from  $67.8^{\circ}$  to  $82.5^{\circ}$  in Texas.

## PRECIPITATION.

The precipitation over the Rio Grande watershed was decidedly deficient, except locally at a few stations in northern New Mexico. The average for the watershed, 0.50 inch, was 0.76 inch less than the normal. Over 50 per cent of the stations between Carrizozo, N. Mex., and El Paso, Tex., received less than a measurable amount of moisture. The precipitation over the Rio Pecos watershed was also very light. The average for the entire drainage area, 0.66 inch, was but little over 50 per cent of the normal amount.

In the Texas watersheds the rainfall was generally light except over the coastal plains and over limited areas in the Neches watershed which had heavy local rains. Heavy rains occurred also in one or two localities in the Nueces and in the upper portions of the Colorado and of the Brazos watersheds. The following are the average amounts in inches and hundredths for the various Texas drainage basins: Nueces, 2.86; San Antonio, 1.58; Guadalupe, 1.73; Lavaca, 2.20; Colorado, 1.77; Brazos, 2.00; Trinity, 2.48; Neches, 4.00; Sabine, 2.10; and coastal plains, 4.55.

## RIVER CONDITIONS.

The Rio Pecos and Rio Grande were well up during the latter half of the month. The volume discharged by the latter stream has not been equaled in May during the past five or six years. A temporary rise occurred after the 1st, but the stages reached were not out of the ordinary. After the 15th there was a steady rise in the upper reaches, and after the 19th or 20th, in the middle reaches, where the maximum stage occurred on the 31st. The high water caused considerable damage south of Albuquerque, N. Mex. Headgates, ditches, and roads were damaged, crops on bottom lands destroyed by the flooding of fields, and bridges were weakened by the undermining of piers. Several spans of the county bridge at Belen, N. Mex., were carried out.

The Texas streams were all at low watermark toward the close of the month, although the Trinity, Neches, and Sabine were well up during the fore part of the month, and moderate rises occurred in the Colorado and Brazos during the first decade.

## DESTRUCTIVE LOCAL STORMS.

*Tornado*.—A tornado with well defined funnel-shaped cloud occurred at North Laredo, a suburb of Laredo, Tex., at 7:45 p. m. of the 1st, which came from the southeast and went toward the northwest. The path of destruction was about 200 yards in width. One person, a baby, was killed, and 6 persons were injured, while 14 buildings were wrecked or badly damaged, causing a loss of approximately \$10,000. The funnel cloud jumped over some strips of land without doing damage.

*Hailstorm*.—A severe hailstorm occurred between 6 and 7 p. m. of the 8th at Plainview, N. Mex. The storm came from the northwest and went toward the southeast, covering an area of 2 miles wide and 8 miles long. The hailstones were as large as hen's eggs, breaking through corrugated iron roofs, killing birds and other small animals, and destroying vegetables.

TABLE 1.—Climatological data for May, 1912. District No. 8, Texas and Rio Grande Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Sky.	Prevailing wind direction.	Observers.				
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<b>Colorado.</b>																				
Blanca.	Costilla.	7,865	3								0.26	0.26	2.5	1	15	12	4	sw.	Dr. L. C. Audrain.	
Cumbres.	Conejos.	10,015	5								0.02	-0.73	0.02	0	1	13	14	4	sw.	Mrs. Ida M. Lively.
Garnett.	Costilla.	7,576	19	50.6	+ 1.8	82	28	19	5	48	0.53		5.5	4	18	5	8	w.	Chas. Speiser.	
Hermit.	Hinsdale.	9,343	5	37.0		68	29	5	5	46	1.26	0.37	11.5	4	13	10	8	w.	Marion Mason.	
La Veta Pass.	Costilla.	9,000	2								0.42	0.23	4.0	0	3	11 <sup>a</sup>	16 <sup>a</sup>	3 <sup>a</sup>	sw.	Clara M. Wright.
Manassa.	Conejos.	7,700	6	49.9		81 <sup>a</sup>	25	21 <sup>a</sup>	57	48 <sup>a</sup>	0.67	0.32	7.3	4	12	12	7	sw.	J. B. Chapman.	
Platoro.	do.	7,675	5															w.	Walter R. Hook.	
Saguache.	Saguache.	7,740	20	52.4	+ 0.8	85	30	21	4	47	T.	-0.74	T.	0	6	7	18	w.	Eugene Williams.	
San Luis.	Costilla.	7,794	21	49.4	- 0.4	80	29	22	57	49	0.68	0.31	4.0	2	22	22	0	sw.	P. B. Albright.	
Wagon Wheel Gap Experiment Station.	Mineral.	9,235	1	42.8	+ 0.3	69	29	18	4	37	0.31	-0.09	0.13	2.6	4	13	11	7	ne.	U. S. Weather Bureau.
<b>New Mexico.</b>																				
Agricultural College.	Dona Ana.	3,863	51	67.0	- 3.3	96	24 <sup>f</sup>	31	4	47	0.08	-0.16	0.06	0	2	26	4	1	w.	N. Mex. Agricultural College.
Alamogordo (near).	Otero.	4,338	15	68.2	+ 0.3	98	25 <sup>f</sup>	35	47	47	0.14	-0.07	0.12	0	2	22	7	2	sw.	Edward Le Breton.
Alamogordo.	do.	4,320	3								0.17		0.17	0	1					Agent E. P. & S. W. R. R.
Alamos Ranch.	Sandoval.	7,800	2								1.23		1.00	4.0	8	27	3	1	sw.	Harold H. Brook.
Albuquerque.	Bernalillo.	5,000	36								0.41		0.33	0	3					Pitt Ross.
Ancho.	Lincoln.	6,112	3																	Agent E. P. & S. W. R. R.
Anchor Mine.	Taos.	10,600	1																	Charles H. Brigham.
Artesia.	Eddy.	3,350	4	69.6		102	26	33	4	54	0.15		0.15	0	1	24	2	5	sw.	Will Benson.
Aspen Grove Ranch.	Rio Arriba.	9,000	3								0.46		0.26	6.8	3	12	19	0		J. D. Maupin.
Banks.	Roosevelt.																			Aaron Hawkins.
Batemann Ranch.	Rio Arriba.	8,900	3								0.40		0.20	3.6	2	16	14	1	w.	John W. Bateman.
Berino.	Dona Ana.	3,788	1								0.00		0.00	0	0					J. C. Rishabarger.
Bluewater.	Valencia.	6,732	10	52.9	- 2.9	87	30 <sup>f</sup>	21	4 <sup>f</sup>	55	T.		T.	0	0	24	6	1	w.	Bluewater Development Co.
Boaz.	Chaves.	4,154	3	66.7		102	26	29	5	53	0.72		0.41	0	5	23	0	sw.	D. C. Savage.	
Capitan.	Lincoln.	6,348	3								0.64		0.44	0	2	3	15	13	n.	Agent E. P. & S. W. R. R.
Carlsbad.	Eddy.	3,120	17	71.1	- 0.6	102	26	39 <sup>d</sup>	15	52	0.19	-0.33	0.15	0	3	25	5	1	sw.	U. S. Reclamation Service.
Carrizozo.	Lincoln.	5,429	4	63.0		89	26 <sup>f</sup>	28	16	44	0.08		0.08	0	1	24	6	1	s.	Agent E. P. & S. W. R. R.
Cerrillos (near).	Santa Fe.	5,700									0.50		0.30	0.8	5	18	9	4	sw.	Irving C. Sweet.
Chama.	Rio Arriba.	7,851	14	48.6	- 1.5	80	29	20	4	44	0.76	-0.49	0.40	4.0	2	25	6	0		Frank C. Johnson.
Cloudcroft.	Otero.	8,650	10	52.2	+ 2.9	85	31	27	4	39	0.30	-0.22	0.30	0	1					Agent E. P. & S. W. R. R.
Corona.	Lincoln.	6,666	3			86	29	32	14		0.43		0.20	0	3	22	4	5	sw.	Do.
Coyote.	do.	5,800	3								0.45		0.25	0	3	28	0	3	sw.	Do.
Cundiyo.	Santa Fe.	6,889	3								0.68		0.32	0	4	20	7	4	w.	Juan Vijil.
Demonstration Farm.	San Miguel.	6,800	3								0.84		0.50	5.0	4					Erb & Westerman.
Duran.	Torrance.	6,272	3								0.90		0.70	0	3	23	4	4	sw.	Agent E. P. & S. W. R. R.
Escondido.	Otero.	4,014	3			102	26	39	4		0.00		0.00	0	0	25	0	6	sw.	Do.
Espanola.	Rio Arriba.	5,590	14	58.4	+ 0.1	87	30	28	6	50	1.42	+ 0.48	0.65		4	20	7	4	sw.	Mrs. E. F. McBride.
Esfancia.	Torrance.	6,140	7								0.03		0.03	0	1	27	4	0	sw.	Agent N. M. Central R. R.
Fort Stanton.	Lincoln.	6,231	35	58.8	- 0.3	88	24 <sup>f</sup>	27	4	48	0.57	-0.13	0.27	0	3	24	4	3	w.	U. S. Sanitarium.
Fort Sumner.	Guadalupe.	3,900	4								0.91		0.70	0	4	20	8	3	sw.	Peter Yocky.
Gallinas.	Lincoln.	6,635	3								0.9		0.64	0	3	25	1	5	w.	Agent E. P. & S. W. R. R.
Gallinas Planting Sta.	San Miguel.	7,500	5	52.2		80	28	20	15	42	1.86		1.00	10.0	2	21	8	2	sw.	U. S. Forest Service.
Glorietta Ranch.	Socorro.	5,700	2								0.79		0.64	9.0	2	22	9	9	sw.	Charles M. Crossman.
Harvey's Upper Ranch.	San Miguel.	9,400	3																	R. B. Schoonmaker.
Hondo Reservoir.	Chaves.	3,904	3	70.2		100	26	32	15	50	0.14		0.10	0	2	27	3	1	sw.	U. S. Reclamation Service.
Jemez Springs.	Sandoval.	6,100	2	58.7		83	29	28	4	39	0.33		0.25	0	2	19	5	7	sw.	Linus L. Shields.
Knowles (near).	Eddy.	4,300	2	70.0		99	26	33	15	49	0.20		0.15	0	2	20	8	3	w.	J. W. Mosley.
Laguna.	Valencia.	5,810	7	60.2		92	25 <sup>f</sup>	30	4	50	T.		T.	0	0					Gus Weiss.
Lagunita.	Guadalupe.	4,500	7								0.03		0.03	0	1	27	4	0	sw.	P. A. Turnbull.
Lake Valley.	Santa Fe.	5,412	7								0.03		0.03	0	1	30	0	1	w.	Wm. P. Keil.
Lakewood.	Eddy.	3,170									0.91		0.62	6.0	9	22	7	2	sw.	Miss J. Knapp.
Las Vegas.	San Miguel.	6,385	25	54.8	- 2.4	80	25	26	15	41	1.87	-0.03	0.62	6.0	9	22	7	2	sw.	N. Mex. Normal University.
Liston.	Chaves.	5,000	2								0.91		0.70	0	4	20	8	3	sw.	H. G. Liston.
Los Lunas (near).	Valeucia.	4,900	23	62.2	- 1.5	94	25 <sup>f</sup>	29	4	50	0.22	-0.55	0.10	0	3	11	20	0		Richard Pohl.
Magdalena.	Socorro.	6,557	7	59.0		87	31	28	4	42	0.13		0.10	0	2	26	5	0	w.	William Pender.
Mescalero.	Otero.	6,627	1	56.8		83	25 <sup>f</sup>	26	15	41	0.20		0.20	0	1	24	1	6	sw.	Rev. Richard H. Harper.
Mineral Hill.	San Miguel.	7,050	7								0.79		0.64	9.0	3	22	9	9	sw.	W. M. Nelson.
Monterey.	Otero.	4,436	3			95	26	38	4		T.		T.	0	0	23	8	0	sw.	Agent E. P. & S. W. R. R.
Mountainair.	Torrance.	6,547	10								0.07		0.07	0	1	30	0	1	w.	Miss Julia Hill.
Newman.	Otero.	3,989	3			98	29				0.07		0.10	0	1	29	0	2	sw.	Agent E. P. & S. W. R. R.
Noria.	Dona Ana.	4,114	3								0.10		0.10	0	0	22	7	2	sw.	Do.
Orogrande.	Otero.	4,171	3								0.06		0.04	0	2	23	7	1	s.	Eugene F. Jones.
Oscura.	Lincoln.	5,016	3								0.26		0.14	0	3	27	2	2	se.	A. M. Hove.
Otis.	Eddy.	3,100	3								0.26		0.22	0	4	12	11	8	w.	Otto Goetz.
Pastura.	Guadalupe.	5,285	3								0.02		0.42	0	2	12	11	8	w.	Agent E. P. & S. W. R. R.
Placitas (near).	Bernalillo.	8,000	1	52.3		78	29	26	4	39	0.75		0.57	4.5	4	19	11	1	w.	George E. Ellis.
Plainview.	Chaves.	4,300	1	67.9		99	24	30	5	44	1.54		1.00	0	5	22	7	2	sw.	L. P. Adair.
Red River Canyon.	Taos.	8,956	5	47.8		76	24 <sup>f</sup>	22	28	45	1.41		1.17	16.0	3	21	9	1	e.	Mrs. L. R. Penn.
Rincon.	Dona Ana.	4,030	18	67.6	- 0.3	98	28 <sup>f</sup>	29	4	54	T.	-0.20	T.	0	0	12	11	8	w.	Charles H. Raitt.
Rio Grande Dam.	Santa Fe.	4,265	22	69.5	+ 3.4	96	27	38	2	50	T.	-0.28								

TABLE 1.—*Climatological data for May, 1912. District No. 8—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Sky.	Prevailing wind direction.	Observers.				
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.10 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>New Mexico—Contd.</i>																				
Tres Piedras.	Taos.	8,076	9	51.2		77	23	23	17	47	1.10		0.66	8.3	12	7	2	sw.	U. S. Forest Service.	
Truchas.	Rio Arriba.	7,935	3	51.4		77	29	21	5	36	1.10		0.66	8.3	6	4	23	w.	Miss Ruth Rendon.	
Tularosa.	Otero.	4,436	3			90	27				0.51		0.38	0.2	3	22	6	3	sw.	I. L. Fairless.
Vaughn.	Guadalupe.	5,952	3			78	31	30	5†	33	1.18		0.30	5.8	8	21	9	1	sw.	Agent E. P. & S. W. R. R.
Virgilville.	Taos.	7,500	2	56.9		66	29	20	4†	35	1.25	—0.42	0.40	12.5	4	15	12	4	s.	Dr. I. N. Woodman.
Winsors.	San Miguel.	8,200	16	41.2	-4.8															James F. Matty.
<i>Texas.</i>																				
Abilene.	Taylor.	1,738	27	73.8	+ 1.9	102	27	47	14	34	1.80	-1.92	0.92	0	5	15	12	4	s.	U. S. Weather Bureau.
Albany.	Shackelford.	1,429	18	72.1	-0.4	103	27	44	13†	44	1.40	-2.09	0.67	0	4	27	2	2	...	N. L. Bartholomew.
Alice.	Jim Wells.	209	1	77.0		99	28	50	16	40	3.25		2.05	0	5	9	11	11	se.	R. M. Boerum.
Alpine.	Brewster.	4,482	2																	J. Frank Dobie.
Alvin.	Brazoria.	49	14	75.6		98	25	54	17	33	5.54	+ 1.79	5.48	0	3	16	12	3	s.	Alvin Japanese Nursery.
Anahuac.	Chambers.	23	3																	Lone Star Canal Co.
Antelope.	Jack.	1																		Paul Rudolph.
Aspermont.	Stonewall.	1																		Bryant Link Co.
Austin.	Travis.	593	56	76.2	+ 1.7	99	28	55	16	30	0.84	-3.35	0.57	0	5	17	10	4	s.	A. Deussen.
Ballinger.	Runnels.	1,637	16	74.0	+ 1.5	103	27	48	14†	41	5.05	+ 1.61	2.00	0	6	20	3	8	s.	E. M. Eubank.
Barstow.	Ward.	2,573	5	75.3		106	26	39	5	50	0.16		0.16	0	1	24	6	1	e.	Lee F. Freeman.
Bay City.	Matagorda.	53	2	75.6		92	30	56	16	31	4.51		4.36	0	4	13	6	12	s.	E. C. Quereau.
Beaumont.	Jefferson.	29	11	75.6	+ 0.4	95	25	56	16	30	3.96	+ 3.75	4.30	0	5	15	0	16	se.	John Bender.
Beeville.	Bee.	225	16	76.8	-0.3	95	30	53	16	40	5.78	+ 2.26	3.65	0	7	11	10	10	se.	L. E. Dickey.
Big Springs.	Howard.	2,396	14	75.4	+ 2.5	105	27	42	15	41	1.10	-2.16	0.52	0	3	19	11	1	s.	B. Reagan.
Blanco.	Blanco.	1,350	16	75.3	+ 4.2	102	28	47	13	34	1.09	-1.70	0.73	0	3	16	13	2	s.	R. C. Crist.
Boerne.	Kendall.	1,412	20	73.4	+ 0.8	103	28	45	11†	45	1.15	-3.05	0.65	0	5	15	13	3	se.	F. W. Schweppe.
Booth.	Fort Bend.	81	11																	T. R. Booth.
Bowie.	Montague.	1,113	17	74.6	+ 3.5	98	27	46	12	32	2.33	-2.80	1.02	0	3	25	2	4	s.	Craig Anderson.
Brady.	McCullough.	1,500	11																	J. W. Griffin.
Brazoria.	Brazoria.	25	23	75.2	+ 0.6	95	29	52	16	36	2.99	-0.17	2.05	0	7	23	5	3	s.	Mrs. M. A. Stevens.
Brazos.	Palo Pinto.	801	3																	Robt. E. Boyett.
Brenham.	Washington.	350	27	75.6	+ 0.4	94	23	56	16	29	2.74	-1.01	0.69	0	8	12	13	6	se.	Mrs. B. F. Sloan.
Bridgeport.	Wise.	754	3																	Claude Strange.
Brighton.	Nueces.	12	19	73.8	-1.5	100	17	45	16	51	3.34	+ 5.42	4.60	0	3	25	4	2	s.	G. H. Ritter.
Brownsville.	Cameron.	38	48	80.1	+ 1.5	98	10	56	16	33	1.59	-0.56	1.55	0	4	24	8	1	s.	U. S. Weather Bureau.
Brownwood.	Brown.	1,342	20	73.2	+ 5.4	102	27	48	16†	44	2.49	-1.53	1.01	0	6	22	8	1	s.	Mrs. Pearl Smith.
Cameron.	Milan.	4	77.0			100	27†	53	11†	33	1.68		0.84	0	5	26	3	2	s.	J. E. Watts.
Carmona.	Polk.	330	4	73.4		94	28	45	17	36	3.44		1.11	0	7	17	12	2	s.	M. S. Spitzer.
Carizzo Springs.	Dimmitt.	78.3	3			105	28†	55	16	37	1.81		0.75	0	4	26	2	3	e.	M. E. Cook.
Claytonville.	Fisher.	2,100	17	74.2	+ 3.2	105	27	37	8	48	1.72	-1.49	1.07	0	3	12	7	12	s.	Wm. Lanier.
Clifton.	Bosque.	671	1																	R. M. Jones.
Coleman.	Coleman.	1,710	18	75.0	+ 3.8	99	27	48	14	41	3.55		1.80	0	5	14	16	1	s.	J. E. Stevens.
Collegeport.	Matagorda.	74.4	2			92	4†	54	13†	32	1.65		0.40	0	5	13	13	5	se.	H. A. Clapp.
College Station.	Brazos.	308	22	76.0	+ 2.4	97	28	52	17	33	4.12	-0.45	2.00	0	7	11	11	9	s.	Prof. G. S. Fraps.
Colorado.	Mitchell.	2,066	18																	R. M. Webb.
Columbia.	Brazoria.	34	23			93	29	51	17											Mrs. Sophie Bridge.
Columbus.	Colorado.	206	8																	U. S. Weather Bureau.
Corpus Christi.	Nueces.	20	25	76.5	0.0	89	16	69	16	29	2.48	+ 5.67	6.56	0	8	10	16	5	se.	D. H. Winn.
Corsicana.	Navarro.	445	23	72.8	-0.9	94	28	53	13†	28	3.66	-1.60	1.26	0	8	20	2	9	s.	Holland Agricultural Co.
Cotulla.	La Salle.	425	5																	A. M. Rencher.
Crockett.	Houston.	350	8	75.2		96	28†	52	16	35	1.83		0.69	0	4	18	11	2	s.	H. R. Frobose.
Cuero.	De Witt.	177	22	77.4	+ 0.3	98	29†	51	16	40	1.52	-2.07	0.84	0	6	16	2	13	s.	G. A. Eisenlohr.
Dallas.	Dallas.	466	23	73.4	+ 0.6	97	28†	49	17	40	1.04	-3.30	0.49	0	6	13	4	14	s.	H. P. Hermansen.
Danevang.	Wharton.	145	16	76.5	+ 0.3	98	30	50	18	35	3.90	-0.62	3.90	0	1	22	4	4	se.	Ft. Worth & Denver City Ry.
Decatur.	Wise.	1,047	16																	U. S. Weather Bureau.
Del Rio.	Valverde.	952	6	79.4	+ 2.5	108	28	46	16	47	0.08	-2.88	0.07	0	2	19	9	3	se.	M. A. Keller.
Devine.	Medina.	653	2	79.0		107	28	53	16	40	3.70		2.00	0	5	21	6	4	se.	J. M. B. McKnight.
Dialville.	Cherokee.	575	8	73.2		94	28	52	11†	29	1.42		0.95	0	5	19	8	4	s.	John W. Miller.
Dilley.	Frio.	569	2																	Jno. O. Shafer.
Dublin.	Erath.	1,466	16	74.8	+ 3.3	103	27	48	15	40	4.70	+ 0.67	2.03	0	6	13	17	1	s.	J. C. Edgar.
Duval.	Travis.	820	23	75.3	+ 0.1	98	28	51	5	30	0.52	-3.55	0.34	0	2	22	5	4	se.	Charles Tarver.
Eagle Pass.	Maverick.	800	35	80.8	+ 1.4	110	28	51	16	45	0.75	-2.36	0.43	0	3	13	14	4	se.	Wm. D. Cook.
Eastland.	Eastland.	1,420	5	72.2		100	27	48	13	37	2.67		0.85	0	5	12	16	3	s.	E. L. Fairies.
Edna.	Jackson.	71	3																	U. S. Weather Bureau.
El Paso.	El Paso.	3,762	33	71.5	-0.6	96	25	44	4	39	T.	-0.35	T.	0	0	26	3	2	nw.	Walter Pettit.
Encinal.	Lasalle.	558	4			105	28	40	5†	36	3.65		2.60	0	4	13	9	9	s.	E. W. Neal.
Eola.	Concho.	1																	R. L. Bush.	
Fairland.	Burnet.	1,000	23	76.2	+ 3.5	104	28	49	12†	36	0.46	-2.72	0.34	0	3	24	5	2	s.	W. A. Gardner.
Falfurrias.	Brooks.	4	80.6			102	27†	58	13	35	1.75		0.57	0	5	17	11	3	se.	Fred W. Laux.
Flatonia.	Fayette.	405	4	75.6		95	29†	54	12†	35	1.28		0.58	0	5	21	2	8	s.	F. C. C. Carter.
Flint.	Smith.	483	2	73.6		94	25†	46	17	36	2.40		1.07	0	7	18	9	4	sw.	Post Hospital.
Fort Clark.	Kinney.	1,050	41	78.1	+ 1.6	105	28	60	6†	36	0.90	-2.74	0.90	0	1	28	3	0	e.	T. J. Dunble.
Fort Davis.	Jeff Davis.	5,000	33																	H. H. Butz.
Fort McIntosh.	Webb.	460	44	82.4																

TABLE 1.—Climatological data for May, 1912. District No. 8—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<b>Texas—Continued.</b>																				
Hewitt.....	McLennan.....	664	17	.....	.....	.....	.....	.....	.....	.....	1.09	.....	0.67	0	3	.....	I. H. Earle.			
Hico.....	Hamilton.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1.82	- 3.08	0.86	0	5	21	3	s.	John A. Eskins.	
Hillsboro.....	Hill.....	628	9	72.4	.....	98	25†	49	13†	41	2.12	.....	1.10	0	5	16	6	9	se.	W. G. Escott.
Hondo.....	Medina.....	901	13	76.4	.....	102	28	51	16	39	3.37	- 1.25	1.80	0	5	13	13	5	se.	H. E. Haass.
Houston.....	Harris.....	138	22	75.6	+ 0.1	92	30	55	16	26	5.02	- 0.09	3.61	0	7	13	12	1	se.	U. S. Weather Bureau.
Huntsville.....	Walker.....	400	28	74.2	- 0.2	94	28	52	17†	32	1.88	- 3.05	0.96	0	3	19	0	12	se.	W. Y. Barr.
Jayton.....	Kent.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wichita Valley Ry. Co.	
Jewett.....	Leon.....	496	8	75.2	.....	97	25	49	17	34	3.45	.....	1.60	0	4	21	3	7	s.	Earle Adkisson.
Junction.....	Kimble.....	1,645	11	73.6	.....	104	28	42	16	46	0.48	- 2.91	0.20	0	3	26	2	3	s.	Judge John S. Durst.
Kaufman.....	Kaufman.....	448	13	74.8	+ 1.2	96	28†	51	12†	32	2.12	- 2.62	1.10	0	4	24	7	0	s.	B. J. Hubbard.
Kerrville.....	Kerr.....	1,650	16	74.3	+ 2.1	101	28	43	16	45	0.19	- 3.31	0.10	0	2	18	12	1	s.	Robert E. Horne.
Killeen.....	Bell.....	.....	20	76.9	.....	103	28	52	16	42	0.94	.....	0.60	0	4	14	13	4	s.	J. E. Root, jr.
Knickerbocker.....	Tom Green.....	2,050	8	75.0	.....	103	27	44	12	46	0.60	.....	0.42	0	3	23	7	1	se.	Jos. Tweedy.
Kopperl.....	Bosque.....	576	15	.....	.....	.....	.....	.....	.....	.....	2.20	- 3.89	0.70	0	5	14	8	9	s.	T. A. Johnson.
Lagrange.....	Fayette.....	276	2	.....	.....	.....	.....	.....	.....	.....	1.71	.....	0.52	0	6	24	2	5	se.	August Hermes.
Lamesa.....	Dawson.....	2,500	2	.....	.....	.....	.....	.....	.....	.....	0.67	.....	0.63	0	2	.....	.....	.....	s.	S. D. Austin.
Lampasas.....	Lampasas.....	1,026	20	74.4	+ 1.5	100	27	45	15	42	0.88	- 2.78	0.47	0	3	16	5	10	s.	Mrs. K. I. Webber.
La Para.....	Willacy.....	38	10	.....	.....	.....	.....	61	16	.....	4.95	+ 2.65	2.80	0	5	15	7	9	se.	Jno. G. Kenedy.
Laureles Ranch.....	Nueces.....	20	12	.....	.....	.....	.....	.....	.....	.....	14.03	+ 11.81	5.50	0	4	21	2	8	s.	Matt Cody.
Liberty.....	Liberty.....	38	8	74.2	.....	94	30	52	17	31	5.86	.....	2.50	0	5	21	7	3	s.	Mrs. Fannie Sneed.
Llano.....	Llano.....	1,040	21	77.3	+ 2.5	101	28	53	13	34	0.12	- 2.43	0.12	0	0	23	0	8	s.	E. W. Torrence.
Llano Grande.....	Hidalgo.....	86	4	77.8	.....	103	10	43	16	52	0.00	.....	0.00	0	0	12	1	18	s.	M. D. Wardlow.
Long Lake.....	Anderson.....	229	7	.....	.....	.....	.....	.....	.....	.....	4.32	.....	0.96	0	6	12	1	18	s.	Geo. W. Ellis.
Longview.....	Gregg.....	336	26	74.9	+ 1.1	97	25†	50	17	36	2.02	- 2.39	1.19	0	3	21	2	8	ne.	C. A. Propst.
Lubbock.....	Lubbock.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1.58	.....	0.44	0	6	16	11	4	s.	A. L. Paschall.
Lufkin.....	Angelina.....	325	5	73.2	.....	93	28	48	17	32	2.62	.....	1.90	0	5	23	4	4	s.	T. A. King.
Luling.....	Caldwell.....	418	23	77.7	+ 2.0	100	28	54	16	36	1.24	- 2.08	0.49	0	5	9	14	8	s.	John Carter.
McGregor.....	McLennan.....	713	2	.....	.....	.....	.....	.....	.....	.....	1.20	.....	0.52	0	3	24*	1*	5*	s.	W. H. Whitley.
McKinney.....	Collin.....	612	10	73.7	.....	96	26	47	13	38	1.55	- 6.78	0.63	0	5	18	12	1	s.	H. Killingsworth.
Marathon.....	Brewster.....	4,043	2	69.2	.....	95	27	40	15	46	0.35	.....	0.20	0	2	16	10	5	s.	Rev. A. P. Willis.
Marble Falls.....	Burnet.....	771	4	.....	.....	.....	.....	.....	.....	.....	0.25	.....	0.12	0	3	9	4	18	.....	R. H. Cochran.
Marfa.....	Presidio.....	4	.....	.....	.....	.....	.....	.....	.....	.....	0.31	.....	0.30	0	2	.....	.....	.....	.....	R. K. Colquitt.
Marshall.....	Harrison.....	375	11	73.2	.....	94	25†	45	17	34	2.42	- 2.47	2.00	0	4	3	26	2	s.	Lee Scott.
Matagorda.....	Matagorda.....	12	2	.....	.....	.....	.....	.....	.....	.....	3.16	.....	3.01	0	3	22	6	3	s.	W. E. McNabb.
Mexia.....	Limestone.....	537	8	72.6	.....	97	28	49	17	34	1.41	.....	0.69	0	4	14	11	6	s.	Miss Josephine Newman.
Midland.....	Midland.....	5	8	73.0	.....	103	27	44	14	46	7.34	.....	4.00	0	6	21	9	1	sw.	W. M. Midkiff.
Mission.....	Hidalgo.....	140	2	81.0	.....	98	30	53	16	38	0.89	.....	0.36	0	4	14	17	0	se.	Chas. M. Kennelly.
Mont Belvieu.....	Chambers.....	65	2	.....	.....	.....	.....	.....	.....	.....	3.66	.....	1.81	0	8	11	6	s.	A. R. Shearer.	
Mountain View.....	Crosby.....	2,750	23	69.9	+ 1.7	97	22	40	15	43	2.15	- 0.08	0.87	0	4	13	10	8	s.	Lucius W. Gosselin.
Mount Blanco.....	Nacogdoches.....	2,900	2	72.0	+ 0.1	91	28†	46	16	31	9.44	+ 4.30	3.88	0	6	17	4	10	s.	Miss Mary Hofmann.
Nacogdoches.....	Nacogdoches.....	271	13	72.0	+ 0.1	91	28†	52	16	33	2.21	- 1.00	0.72	0	6	16	11	4	s.	J. Giesecke.
New Braunfels.....	Comal.....	720	23	75.7	+ 1.3	97	28	52	16	33	5.45	+ 2.12	2.70	0	4	21	6	4	s.	U. S. Weather Bureau.
Palestine.....	Anderson.....	510	20	73.0	+ 0.5	91	28	50	17	29	2.73	- 2.16	0.89	0	9	22	3	1	s.	E. H. Snider.
Pauter.....	Hood.....	1,000	23	.....	.....	.....	.....	.....	.....	.....	3.33	- 0.66	1.08	0	4	.....	.....	.....	.....	Earnest De Vilbiss.
Pearshall.....	Frio.....	629	2	.....	.....	.....	.....	.....	.....	.....	1.84	.....	0.95	0	5	15	0	16	s.	R. B. Pointer.
Pierce.....	Wharton.....	102	6	74.2	.....	95	30	52	13†	34	0.87	.....	0.37	0	3	15	0	16	s.	J. F. Sander.
Plainview.....	Hale.....	3,370	16	67.8	- 0.5	97	24	37	15	44	1.56	- 0.92	0.56	0	5	15	14	2	s.	Griffing Bros. Co.
Port Arthur.....	Jefferson.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Bickford.	
Port Lavaca.....	Calhoun.....	20	11	77.0	+ 1.1	93	30	55	16	36	4.70	+ 0.17	3.59	0	4	17	8	6	s.	W. T. Mann.
Post City.....	Garza.....	2,700	2	.....	.....	.....	.....	.....	.....	.....	1.35	.....	0.65	0	4	28	3	0	se.	S. M. Davis.
Putnam.....	Callahan.....	1,591	1	.....	.....	.....	.....	.....	.....	.....	0.91	.....	0.33	0	4	11	18	2	se.	C. H. Pease.
Raymondville.....	Cameron.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Al. Patterson.
Ricardo.....	Nueces.....	57	3	.....	.....	.....	.....	.....	.....	.....	2.69	.....	1.00	0	5	14	6	11	s.	Mrs. C. W. Higdon.
Riviera.....	Walker.....	169	8	.....	.....	.....	.....	.....	.....	.....	3.80	.....	1.00	0	6	12	5	14	s.	Mack Dunkin.
Rockland.....	Tyler.....	136	8	.....	.....	.....	.....	.....	.....	.....	5.48	.....	5.48	0	7	11	19	1	se.	Mrs. G. Grewe.
Rockport*.....	Arauca.....	12	11	76.8	+ 1.3	88	29†	64	15	46	5.45	+ 2.12	2.70	0	4	21	6	4	s.	W. F. M. Ross.
Rossville.....	Atascosa.....	558	5	77.4	.....	103	28	52	16	34	1.73	.....	0.68	0	7	22	4	18	se.	Reiffert & Frobese.
Runge.....	Karnes.....	308	17	.....	.....	.....	.....	.....	.....	.....	1.87	- 3.62	1.08	0	3	22	5	11	s.	Jas. Johnston.
Sabin.....	Uvalde.....	964	8	77.2	.....	105	28†	49	16	41	2.59	.....	1.20	0	6	15	11	5	s.	L. M. Crockett.
Salado.....	Bell.....	2	.....	.....	.....	.....	.....	.....	.....	.....	1.06	.....	0.65	0	3	20	4	7	s.	Sam Crowther.
San Angelo.....	Tom Green.....	1,847	21	76.4	+ 2.7	104	29	41	13†	40	1.12	- 2.04	0.62	0	2	24	7	0	s.	U. S. Weather Bureau.
San Antonio.....	Bexar.....	701	27	76.8	+ 2.0	101	28	55	16	36	1.49	- 1.47	0.60	0	5	14	15	2	se.	H. A. Wilson.
San Augustine.....	San Augustine.....	360	3	73.6	.....	95	28	45	17	34	3.32	.....	1.27	0	9	12*	11*	7*	se.	J. B. McAllen.
San Juanito.....	Hidalgo.....	325	8	82.5	.....	102	28	52	16	42	1.08	.....	0.54	0	7	5	2	24	se.	Miss L. C. Ford.
San Marcos.....	Hays.....	588	19	75.2	+ 1.0	98	28	52	16	33	1.64	- 2.49	0.73	0	3	9	0	22	e.	Jas. Burns.
San Saba.....	San Saba.....	1,712	11	72.8	+ 0.2	98	27	46	12†	37	4.01	+ 0.20	1.51	0	7					

TABLE 2.—*Daily precipitation for May, 1912. District No. 8, Texas and Rio Grande Valley.*

TABLE 2.—*Daily precipitation for May, 1912. District No. 8—Continued.*

TABLE 2.—*Daily precipitation for May, 1912. District No. 8—Continued.*

\* Precipitation included in that of the next measurement.

† Separate dates of falls not recorded.

Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—Maximum and minimum temperatures at selected stations, May, 1912. District No. 8, Texas and Rio Grande Valley.

Date.	Colorado.				New Mexico.										Texas.													
	Garnett.		San Luis.		Agricultural College.		Carlsbad.		Fort Stanton.		Mountain-air.		Rosedale.		Roswell.		Santa Fe.		Santa Rosa.		Abilene.		Big Springs.		Brownsville.		Corpus Christi.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	69	25	67	31	85	42	95	46	80	40	73	49	89	44	70	42	84	45	89	65	100	63	88	68	79	63	63	
2....	68	28	66	35	84	46	91	51	74	42	68	50	87	51	68	43	83	49	86	62	98	64	88	72	81	63	63	
3....	56	31	61	30	70	47	87	59	69	51	62	38	81	51	51	33	76	48	92	70	88	47	89	72	85	72	72	
4....	54	20	49	24	70	21	80	42	65	27	58	32	74	38	53	29	67	39	80	54	81	47	90	75	82	76	76	
5....	57	19	54	22	75	35	86	41	72	28	63	30	82	36	56	32	74	34	84	55	91	51	90	76	78	65	65	
6....	63	21	65	22	80	39	87	45	76	29	67	36	84	40	65	36	80	34	84	58	90	59	93	74	78	69	69	
7....	70	27	66	23	80	44	82	59	76	35	68	48	83	54	68	42	79	44	87	61	87	59	92	76	78	71	71	
8....	70	29	66	32	81	43	84	54	73	32	68	38	82	47	66	43	77	40	83	57	88	58	89	74	79	74	74	
9....	63	33	57	33	73	45	85	58	65	38	60	38	81	53	59	40	77	52	86	63	89	61	92	74	79	75	75	
10....	56	35	53	33	73	39	83	55	68	40	63	38	78	47	56	39	72	43	82	58	87	57	93	78	88	77	77	
11....	63	26	58	26	79	47	81	47	64	33	64	44	74	41	62	38	70	42	74	52	81	50	94	74	84	68	68	
12....	55	30	57	29	83	46	81	46	75	31	64	45	78	46	61	42	71	44	82	72	52	86	64	80	68	68	68	
13....	59	23	55	26	80	55	81	51	62	40	55	40	72	48	53	34	65	38	69	50	72	50	87	64	77	69	69	
14....	52	28	58	26	76	50	64	47	51	39	58	32	52	42	44	32	48	39	55	47	67	46	92	76	76	69	69	
15....	67	28	61	26	75	40	76	39	68	31	65	34	74	36	62	31	71	35	74	48	77	42	78	66	77	63	63	
16....	62	27	67	22	83	40	88	42	75	31	70	45	84	42	68	42	80	41	79	51	82	51	89	56	89	60	60	
17....	72	30	73	31	90	43	98	45	82	34	75	50	90	44	73	45	85	47	89	60	85	55	90	60	81	67	67	
18....	79	34	77	33	92	45	99	47	86	38	80	53	94	48	77	52	88	48	89	66	96	64	87	60	79	73	73	
19....	75	34	73	38	89	55	98	58	81	38	77	54	92	53	73	52	87	53	89	63	94	61	86	62	78	73	73	
20....	75	49	70	37	89	59	95	53	81	54	75	55	92	50	73	47	86	58	92	65	99	63	88	60	80	70	70	
21....	76	37	71	37	90	56	96	56	81	59	77	54	94	61	74	48	89	59	95	67	102	66	89	68	81	71	71	
22....	74	49	70	39	90	58	100	61	80	53	73	48	95	59	73	48	89	54	96	69	102	70	90	68	82	73	73	
23....	73	40	71	37	89	45	100	60	88	45	80	46	95	52	72	43	90	54	92	68	102	69	90	75	82	76	76	
24....	76	30	76	39	95	48	100	60	88	46	79	47	96	50	76	47	93	48	92	70	100	70	90	75	82	77	77	
25....	79	33	77	32	96	51	101	57	88	40	84	52	97	57	78	51	95	49	94	72	99	70	91	76	84	78	78	
Mns..	68.6	32.5	66.7	32.2	84.7	49.2	90.5	451.7	76.4	41.1	71.4	45.2	85.8	49.6	67.5	43.3	80.8	46.8	86.2	61.3	91.1	59.6	89.8	70.4	81.6	71.4	71.4	

Date.	Texas.																											
	Del Rio.		El Paso.		Fort McIntosh.		Fort Stockton.		Fort Worth.		Galveston.		Hallettsville.		Houston.		Lufkin.		Palestine.		Plainview.		San Antonio.		Seymour.		Taylor.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	87	65	86	53	96	66	98	59	89	64	78	71	87	67	83	65	87	61	83	63	87	46	80	66	93	67	86	63
2....	89	67	83	60	97	62	96	57	81	62	86	67	85	70	89	65	81	61	90	50	86	66	88	61	83	64	83	
3....	98	70	76	52	101	69	93	50	85	68	79	75	89	73	89	72	82	67	85	65	90	51	92	71	91	69	88	71
4....	92	70	71	44	98	75	86	45	83	60	80	73	81	70	82	68	80	60	76	65	81	41	81	62	86	65	79	61
5....	82	61	77	45	92	64	90	52	83	57	77	66	80	65	82	62	85	61	79	63	81	39	75	63	87	57	77	64
6....	83	58	81	49	90	66	89	57	80	62	74	67	75	66	85	60	84	62	85	54	74	62	80	60	75	62	82	62
7....	78	66	80	56	87	66	91	62	84	65	77	70	85	65	80	64	80	61	84	63	82	51	85	50	82	66	87	77
8....	84	68	81	57	87	74	96	61	85	65	81	73	87	65	86	69	81	58	84	63	82	52	83	68	82	63	87	68
9....	100	74	75	53	97	71	93	62	85	70	76	73	90	75	82	71	89	59	83	72	76	54	85	71	91	62	86	72
10....	96	66	72	46	95	75	85	58	83	62	77	74	89	65	87	72	86	60	87	70	77	46	91	67	86	67	90	68
11....	86	63	80	51	97	52	79	47	73	57	78	70	83	63	79	66	81	71	60	66	44	84	53	77	60	87	60	
12....	86	54	85	57	99	57	84	45	73	51	76	66	82	59	78	61	74	52	74	53	45	82	56	73	53	77	55	
13....	86	64	83	57	93	65	86	57	75	49	76	68	83	57	78	60	81	55	77	54	64	47	82	59	71	52	81	54
14....	73	58	78	51	92	66	77	47	60	51	76	70	79	64	78	59	83	58	60	41	79	64	83	51	73	57	73	
15....	84	56	77	46	85	61	79	39	74	53	73	61	78	59	74	60	76	57	73	57	37	80	57	79	48	76	59	
16....	93	46	85	46	95	47	9																					